

Industry

- D1. Fishing Effort Rationalization
- D2. Expand Port-Receiving Sites
- D3. Expand Recycling Opportunities/Facilities
- D4. Gear Loss Reporting and Documentation

Industry: Recommendation D1

Title: Fishing Effort Rationalization

Issue(s): Optimization and control of effort

Concern: Extant gear regimes contribute to gear loss

Theme: Promote fishing practices that minimize gear loss

Author(s): Brent Paine, Lee Alverson, Michele Eder

I. Description:

This recommendation addresses the problem of open access fishing, which often encourages overcapitalization of fleets and gear in competition for resources in limited areas and time periods. Frequently these practices can lead to unnecessary loss of fishing gear. Current FAO efforts to rationalize fishing effort on a global scale should be supported by the US government, and Congressional opposition to this management tool should be reviewed.

II. Methods/Steps for Implementing Action:

- A. Inform regional fishery organizations, national and international, of conference position regarding effort rationalization programs, e.g., limited entry, individual quotas, cooperatives, etc. and importance of these programs in the reduction of marine debris.
- B. Educate NGO's as to value of effort rationalization programs as a tool to reduce marine debris
- C. Communicate to the US Congress that the current moratorium on the implementation of effort rationalization systems, such as IQ's is contrary to the goal of reduction of marine debris and the position taken at the International Marine Debris Conference, 2000.

III. Type of Action:

Regulatory, Educational, & Other: Policy

IV. Where should Action be Implemented (specify general geographic areas)?

Include minimum spatial extent: Regional, global

Habitat Type Affected: Ocean-wide

V. Who Implements Action?

Fishery organizations
NOAA
NGO's
Regional management bodies
International fishery organizations
National and international legislative bodies

VI. What is Cost of Action (Estimate)?

One Time (Start up)	Annual O & M
>\$1,000,000	>\$1,000,000

VII. Who Finances?

Government and users

VIII. What are the Benefits (environmental or economic) from Implementation?

Ocean environment and users

IX. Identify the Resources (living or physical) Affected by Action:

All living resources

Industry: Recommendation D2

Title: Expand Port-Receiving Sites

Issue(s): Logistics not in place to receive waste and other materials

Concern: Not many port facilities outfitted in this way - insufficient

Theme: To be able to adequately divert waste and recyclables from being inappropriately dumped at sea and on land according to MARPOL regulations

Author(s): Mark Minton, Lindsey Chapman, Al Burch, Steve Hendrickson

I. Description:

Despite requirements of MARPOL for nations to provide adequate port disposal facilities, many ports in the Pacific do not provide adequate facilities. Implementation of this recommendation will help make adequate facilities available to dispose of waste including fishing gear.

II. Methods/Steps for Implementing Action:

- A. Acquire cranes or other equipment to remove gear from boat to dock.
- B. Acquire holding containers for solid and other waste including liquids and recyclables
- C. Develop transportation system from port dock to landfill or other facility.
- D. Waste oil holding facility and testing equipment. Containers should be provided.
Collection site - charge per gallon or free.
- E. Build oily bilge water holding facility, run through water separating systems and storage/holding facilities for other chemicals, paint, solvents, batteries.
- F. Develop incentive program to encourage utilization of services and facilities, free dumping, etc. (funding needed)
- G. Foster recycling opportunities.

III. Type of Action:

Administrative, Monitoring, Economic, Assessment, Educational, & Other: Improved waste disposal facilities

IV. Where should Action be Implemented (specify general geographic areas)?

Include minimum spatial extent: All ports throughout region. Efforts should focus on major ports, particularly those home porting net fisheries and then targeting progressively less active ports.

Habitat Type Affected: Reduce waste disposal into ocean environment. Reduce pressure on landfill and associated environment.

V. Who Implements Action?

Government (national, state, local, territorial, provincial)/ private sector

VI. What is Cost of Action (Estimate)? *per port*

One Time (Start up)	Annual O & M
\$100,000 to \$500,000	\$100,000 to \$500,000

VII. Who Finances?

National government initially, with gradual transition of costs to local communities and private sector (port users, etc.). Funding for monitoring/assessment should be continued.

VIII. What are the Benefits (environmental or economic) from Implementation?

Reduction of improper disposal of wastes, including fishing gear and associated impacts.

IX. Identify the Resources (living or physical) Affected by Action:

All

Industry: Recommendation D3

Title: Expand Recycling Opportunities/Facilities

Concern: Logistics not in place to recycle waste from fishing practices

Author(s): Mark Minton, Lindsey Chapman, Steve Hendrickson

I. Description:

This recommendation is intended to develop capacity to recycle fishing vessel wastes including netting, gear, oil., plastics, solvents, batteries, cardboard, metals, etc..

II. Methods/Steps for Implementing Action:

- A. Have appropriate waste handling facilities in place (see industry recommendation 2).
- B. Identify recycling facilities and markets and negotiate recycling agreements / contracts.
- C. In consultation with recycling facility, develop procedures and protocols and infrastructure to sort, store and transport materials to recycling facilities.
- D. Develop education and outreach program for fishing community via community outreach coordinator.

III. Type of Action:

Administrative, Monitoring, Economic, Assessment, Educational, & Other

IV. Where should Action be Implemented (specify general geographic areas)?

Include minimum spatial extent: All ports throughout region. Efforts should focus on major ports, particularly those home porting net fisheries and then targeting progressively less active ports.

Habitat Type Affected: Reduce waste disposal into ocean environment. Reduce pressure on landfill and associated environment.

V. Who Implements Action?

Government (national, state, local, territorial, provincial)/ private sector

VI. What is Cost of Action (Estimate)? per port - successful recycling program is dependent on adequate port disposal facilities (see industry recommendation 2) Costs could vary significantly depending on port(s) and location(s).

One Time (Start up)

\$10,000 to \$50,000 equipment

Annual O & M

10,000 to \$50,000

\$50,000 to \$100,000 coordinator (could potentially serve several communities depending on proximity)

VII. Who Finances?

National government initially, with gradual transition of costs to local communities and private sector (port users, etc.). Funding for monitoring/assessment should be continued.

VIII. What are the Benefits (environmental or economic) from Implementation?

Reduction of improper disposal of wastes, including fishing gear and associated impacts. Educational benefit associated with raising local understanding and support for recycling and correct waste disposal.

IX. Identify the Resources (living or physical) Affected by Action:

All

Industry: Recommendation D4

Title: Gear Loss Reporting and Documentation

Concern: Quantification of amount and origin of lost gear

Author(s): Rob Zuanich, Jim Cook, Chris Oliver

I. Description:

This recommendation is intended to establish regional protocols (regulations) at appropriate State, Federal, or other agency levels to require reporting of gear lost and not immediately retrieved. The protocols would be limited to net gear (trawl web, gill net, etc.) and would require reporting of type, location, amount, etc. Difficulties with other gear types led the group to focus only net gear.

II. Methods/Steps for Implementing Action:

- A. Verify current reporting requirements by region and by various jurisdictions (state, Federal, etc.).
- B. Propose specific regulatory language (for each agency)/jurisdiction) to require all federally permitted vessels to submit report form to NMFS Habitat Conservation Division. Could require any loss to be reported, or let Council/industry refine criteria. Limiting the regulations to net gear will likely make it easier to define minimum reporting criteria.
- C. Reporting could additionally be linked to IMO website discussed in other recommendation(s).

III. Type of Action:

Monitoring, Regulatory

IV. Where should Action be Implemented (specify general geographic areas)?

Include minimum spatial extent: North Pacific-wide net/trawl fisheries (US Pacific management council areas)

Habitat Type Affected: Reefs, water column, substrate (potentially all)

V. Who Implements Action?

Council/NMFS at Federal level

State

Other?

VI. What is Cost of Action (Estimate)?

One Time (Start up)

\$500,000 to \$1,000,000

Annual O & M

\$50,000 to \$100,000

VII. Who Finances?

Relevant government agencies.

VIII. What are the Benefits (environmental or economic) from Implementation?

A quantifiable record of current/future net loss (amount and origin). Fishing community and public benefits

IX. Identify the Resources (living or physical) Affected by Action:

Ocean habitats

Protected species

General public

Fishermen

Fisheries